# MARICOPA COUNTY SPECIAL PROVISIONS FOR TRAFFIC CONTROL UNDER PERMIT

## I. RESTRICTING COUNTY ROADS

Traffic control shall comply with these special provisions and follow the guidelines contained

in the latest editions of the Manual on Uniform Traffic Control Devices (Federal Highway Administration) and the City of Phoenix Traffic Barricade Manual. Deviations from these specifications, except during emergency conditions, must have the prior approval of the County Engineer or his representative.

It shall be the permittee's responsibility to provide, erect, maintain and remove all necessary signs, barricades, barriers, sand berms, high level warning devices, off duty law enforcement personnel, lights, delineator, traffic plates, flagmen and other devices necessary to properly mark and control the construction areas for the safe and efficient movement of vehicular and pedestrian traffic. The permittee shall provide a 24-hour emergency telephone number for traffic control. The telephone number shall be on each traffic control device. The permittee shall provide other traffic control devices or measures as deemed necessary by the County Engineer or his representative.

All persons, contractors, utilities and other agencies must notify the Development Service, Inspection Section at phone (602) 506-4625 of all traffic restrictions of County roads and streets. The notification may be by FAX submittal, phone number (602) 506-4009, of the traffic control plans for review at least two workdays (48 hours) prior to start of construction. Construction is not authorized to proceed without MCDOT approval of the Traffic Control Plan (TCP) and concurrence that construction can proceed with minimum public and traffic impact.

#### II. GENERAL TRAFFIC REGULATIONS

The following are the minimum requirements for all traffic control, unless otherwise provided for in the permit or as directed by the County Engineer or his representative.

## A. Traffic Control Plans

A Traffic Control Plan shall be required for all projects that;

- (a) Divert, detour, or interrupt normal flow of traffic:
- (b) work zone within 20 feet of the edge of pavement.

Traffic Control Plans may also be required for other projects. The purpose of a traffic control plan is to encourage forethought as to the time of day, sequence of construction, degree of restriction and traffic control needed. An approved Traffic Control Plan may be modified by MCDOT based on field conditions at the time of work.

Traffic Control Plans may range in complexity from use of typical illustrations in approved traffic control manual to a detailed site plan showing signing, type of intersection, barricading, diversions, detours, and project phasing. In all cases, the required Traffic Control Plan shall satisfactorily address all construction restrictions, the requirements of the permit and these regulations.

## B. Restriction Times

Traffic restrictions are not permitted on arterial or major collector streets during peak traffic hours of 6 a.m. to 8:30 a.m. and 4 p.m. to 7 p.m. weekdays. During off peak traffic hours, the minimum number of lanes shall be two lanes (one in each direction, plus left turn lanes at intersections) on streets with four lanes or less, and four lanes on streets with five or more lanes, unless otherwise approved.

In order to keep nighttime noise to acceptable levels, permitee's shall not conduct any work during the hours of 7:00 p.m. to 6:00 a.m. without the written approval of the County Engineer or his representative. Special noise abatement conditions and procedures will be required if nighttime work is approved.

# C. Use of Off-Duty Officers

When the work zone is within 300 feet of an signalized or major intersection, the permittee shall provide uniformed off-duty law enforcement personnel to assist with traffic control. A deputy may be required at other times if construction conditions dictate or as directed by the County Engineer or his representative.

# D. Lane Requirements

Traffic lanes shall normally be 12 feet in width and have a minimum safe operating speed of 25 miles per hour. When the traffic control plan calls for an asphalt or oil paved detour, the contractor shall provide and maintain it in a safe driveable condition. Where traffic is diverted from the pavement, the contractor shall provide a suitable graded traveling surface with proper dust control. If a diversion will exceed 5 working days, the diversion may require paving or other acceptable dust palliatives as determined by the County Engineer or his representative. When steel plates are used to cover open trenches, bump sign shall be installed to notify motorist. If posted speed is 35 MPH or greater, pinned recessed steel plates shall be required on AC pavement. The contractor shall maintain all traffic control devices 24 hours a day for the entire construction period.

# E. Sheriff Department notification

On all major streets, the Maricopa County Department of Transportation and Maricopa County Sheriff's Office local substation shall be provided with the name and phone number of the person responsible for 24-hour maintenance of traffic control devices.

## F. Closing Roads

Except under emergency conditions, roads shall not be closed for construction activity unless prior approval is obtained from the County Engineer or his representative.

Request for closure shall include an analysis of the impact of diverting traffic to alternate routes versus constructing a paved detour.

## G. Access to Property

Access to all properties for normal services shall be maintained at all times where possible. When local access cannot be maintained, the contractor shall notify the affected property owner/resident at least 48 hours in advance of the access closure. In no case shall the access be restricted for more than eight hours. Access shall not be closed for fire stations, hospitals, sheriff stations and schools. The contractor shall give 48 hours notification to the responsible person for all affected parties, concerning all access restrictions.

# H. Over Night Traffic Diversions

For trenching diversions that move traffic from normal lanes, temporary bypasses shall be utilized during daylight hours only and traffic shall be restored to their normal lanes over night if possible. The use of traffic plates and temporary pavement shall be used. If conditions warrant, exceptions may be granted by the County Engineer or his representative. In addition to barricading and signing, portable barriers and/or sand berms shall be utilized for overnight diversions.

# I. Slurry Backfill

The use of one sack cement slurry backfill under pavement areas shall be required by MCDOT to expedite construction on high volume roads.

#### J. Sidewalk Closure

Pedestrian traffic shall be notified of sidewalk closure by signage at nearest intersections to the affected sidewalk.

## K. Public Safety

If for public safety, MCDOT needs to install traffic barriers due to non-response by contractor, the contractor shall be charged for all time, material and equipment used.

## L.Portable Barriers and sand berms

Portable Jersey Barriers shall be required when construction hazards warrant or when directed by the County Engineer or his representative. The traffic approach ends of all portable barriers shall be protected from vehicle impact by flaring the ends away from the traveled way at a rate consistent with the following table or by the use of approved attenuation devices

Taper	Posted Speed
8:1	35 MPH
9:1	40 MPH

11:1 50 MPH

When a construction hazard warrants and or when required by the County Engineer or his representative, the contractor shall install an approved impact attenuation device or a deceleration sand berm (washed sand approximately five feet high) in the blocked traffic path to prevent errant vehicles from entering the active work site.

## M. Trench Plating

To cover hazards and restore normal traffic flow during non-work times, the use of traffic plates may be required. Use of plates shall be for short time periods, not to exceed three workdays. Extended use may be granted with the approval of the County Engineer or his representative.

### III. EXISTING TRAFFIC SIGNAL AND SIGNING DEVICES

The permittee shall maintain and/or relocate all existing signal indications, warning signs, stop, yield and street name signs; erect, clean and in full view of the intended traffic at all times. Portable signs should be used to supplement blocked or removed signs. Signs in conflict with traffic control signs shall be covered.

The permittee is responsible for the cost of replacing lost signs and for the permanent repair or replacement of damaged signal equipment and loop detectors.

Should damage occur to existing signal equipment, contractor shall notify the MCDOT Inspector (602) 506-8609, immediately to make the necessary temporary repairs to restore traffic signal operations.

The contractor will reset all disturbed signs to permanent locations when construction is completed. The contractor shall notify the MCDOT Inspector when the work is complete. All necessary temporary signs shall remain in place until permanent signs are reset.

## IV. TEMPORARY TRAFFIC CONTROL

- A. A Traffic Control Plan shall be submitted and approved prior to start of work.
- B. Signs, barricades and channeling devices.
  - (a) installed prior to the start of any work;
  - (b) properly maintained and operated when restrictions exist;
  - (c) kept clean and fresh appearing at all times;
  - (d) kept in place only as long as needed;
  - (e) removed from traveled way during non-working hours when restriction no longer exists:
  - (f) removed from the right-of-way within 48 hours of completing work;
  - (g) in accordance with MUTCD standards.

The "SPEED LIMIT 25" sign is used where the existing pavement has been removed, traffic is being maintained on temporary detour or diversion roads, unpaved shoulders, or on traffic lanes that are severely restricted.

Channeling, including "KEEP RIGHT" signs, shall be provided whenever traffic is moved across the street center line, the existing center line is obliterated, or opposing traffic is maintained in other than the normal traffic lanes.

All temporary traffic control devices shall be ballasted with sandbags or other approved ballast when necessary. The use of rocks, concrete or asphalt chunks, concrete blocks, etc., as ballast is prohibited. Ballast shall not be placed on top of any traffic control device.

Flagging, orange fencing, and/or woven plastic tape may be required at open trenches/excavations and/or used between lighted barricades and channeling devices in construction areas to provide additional guidance and security. Open trench signs shall be installed on all open trenches.

Channeling devices are not intended to be physical barriers.

It shall be the permittee responsibility to inspect all traffic control devices at least once during each work day and immediately after a wind or rain storm. Any traffic control device not properly located shall be reinstalled immediately.

## B. Temporary Pavement Markings

Temporary pavement markings may be used to guide traffic on pavement in construction and

maintenance areas. Where temporary markings are required at other than final locations, removable temporary markings or traffic control devices shall be used on pavement that shall

remain. Temporary markings shall be removed and permanent markings placed upon project completion.

Centerline markings shall be two, 4-inch wide yellow lines with a 4-inch space between them.

Lane line markings shall be 4 inches wide, placed with 10 lineal feet of line and 30 lineal feet of

space to form the lane line pattern. Other markings for barrier lines, edge lines, crosswalks

and school zones, may be necessary to complete temporary marking installations. Edge lines

shall be 4-inch wide continuous white lines. Barrier lines for mandatory turn lanes, pavement

edge tapers and lane transitions, shall be 10-inch wide continuous white lines.

# V. SHORT TERM RESTRICTION AND SERVICE VEHICLES

When service or maintenance vehicles must proceed at a slow pace or stop in the road lane or engage in slow moving work on the road shoulders for brief period, they will not have to set up advance warning but they shall display an operating high level warning light system in conjunction with hazard warning flashers.

Striping or sweeping vehicles shall set up warning signs at the beginning and end of their work zone and be equipped with a spray bar. Striping and sweeping operations shall be accomplished in such a manner as to not obscure traffic.

Vehicles equipped with one (1) high level rotating flashing light (8 feet above ground level) are permitted to stop in a travel lane a maximum of 15 minutes without setup of temporary traffic control devices. Vehicles equipped with the above lights and a standard arrow panel are permitted to stop in a travel lane for a maximum of 30 minutes.

The above service vehicles working at signalized intersections, shall also utilize a short taper of cones (minimum 50 feet and 6 cones) in approaching lanes.

Flashing lights and arrow panels shall be located on service vehicles so that they are visible form all directions and are not obscured by truck beds, mounted equipment or work activities.

## VI. Personnel / Detour Time

All traffic control flaggers shall be properly trained and certified by a recognized source, such as the International Municipal Signal Association (IMSA) and shall carry proof of training with them at all times. Flaggers shall use stop and slow paddles to control traffic.

Any detour intended to be in place 5 days or longer shall be accomplished by means of temporary pavement with a design life to complete the work.